

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P192227

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-T2R-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60816 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

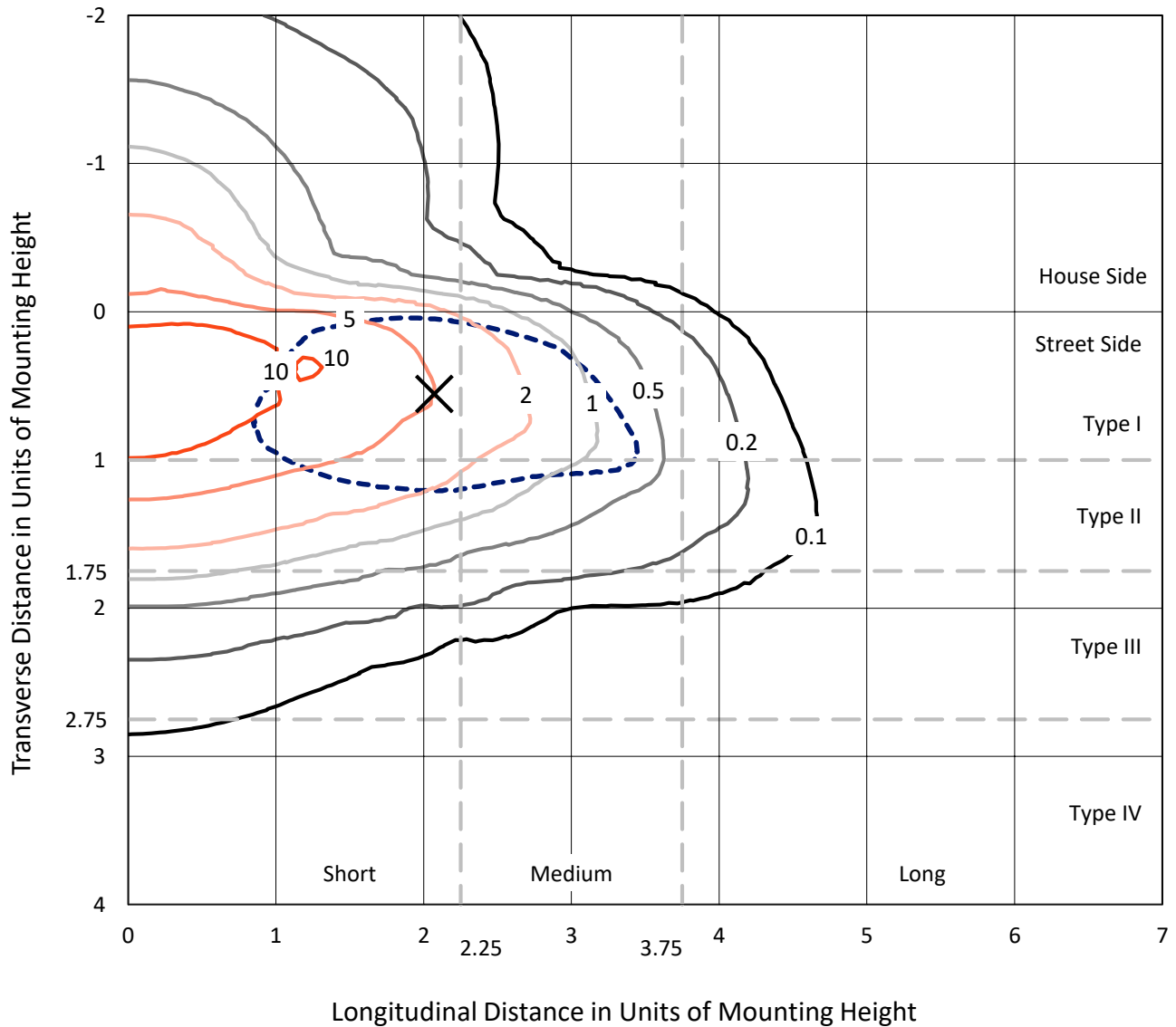


REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

Iso-Footcandle Lines of Horizontal Illumination

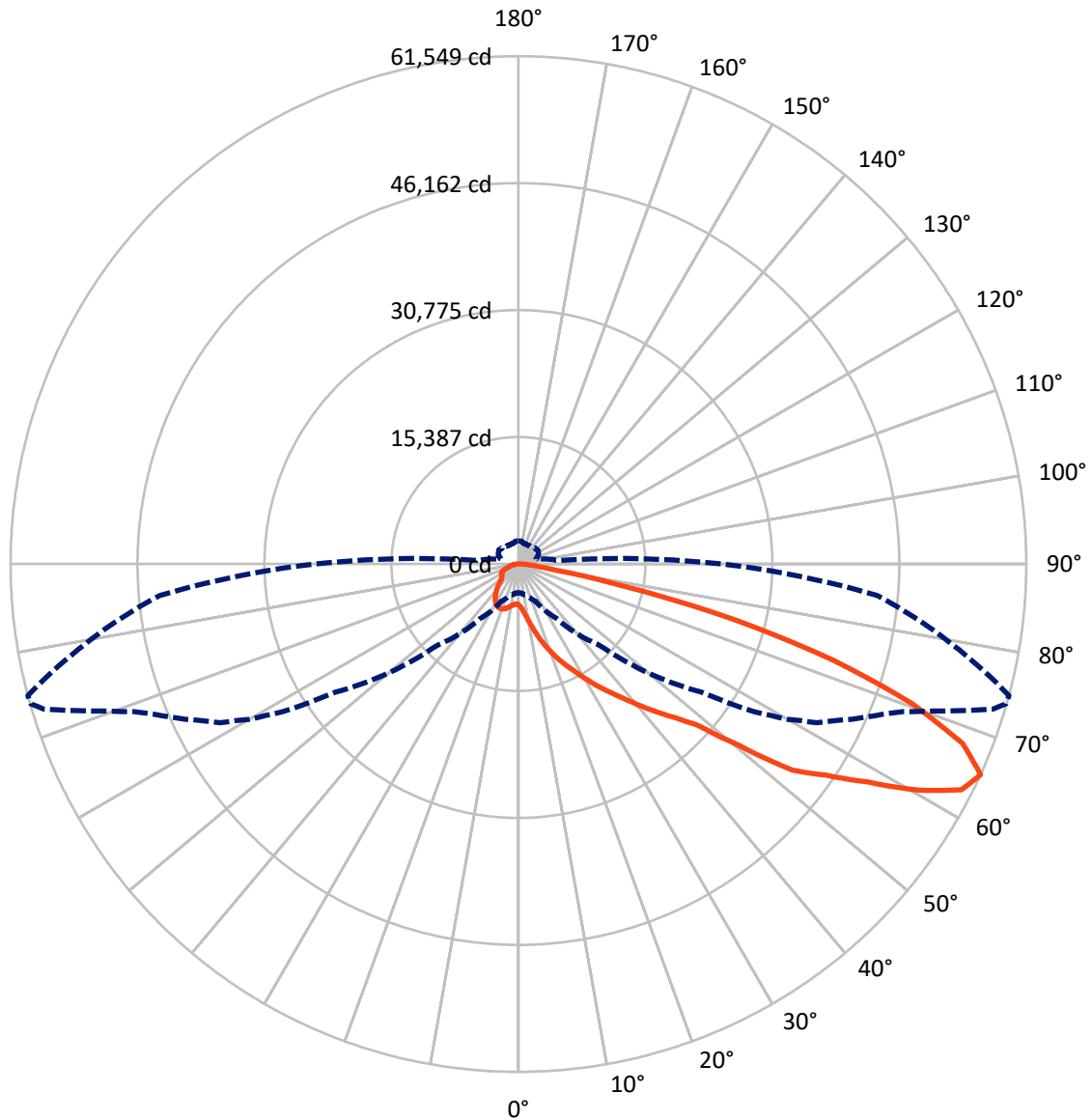
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P192227
CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9376.4	0.0	9376.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	51439.6	0.0	51439.6
	% Fixture	84.6	0.0	84.6
Total	Lumens	60816.0	0.0	60816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.9	1.0
10°-20°	2386.9	3.9
20°-30°	4897.2	8.1
30°-40°	8239.3	13.5
40°-50°	11384.4	18.7
50°-60°	14211.2	23.4
60°-70°	12788.6	21.0
70°-80°	5360.8	8.8
80°-90°	936.6	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	60816.0	100.0
0°-180°	60816.0	100.0

Coefficient of Utilization



REPORT NUMBER: P192227

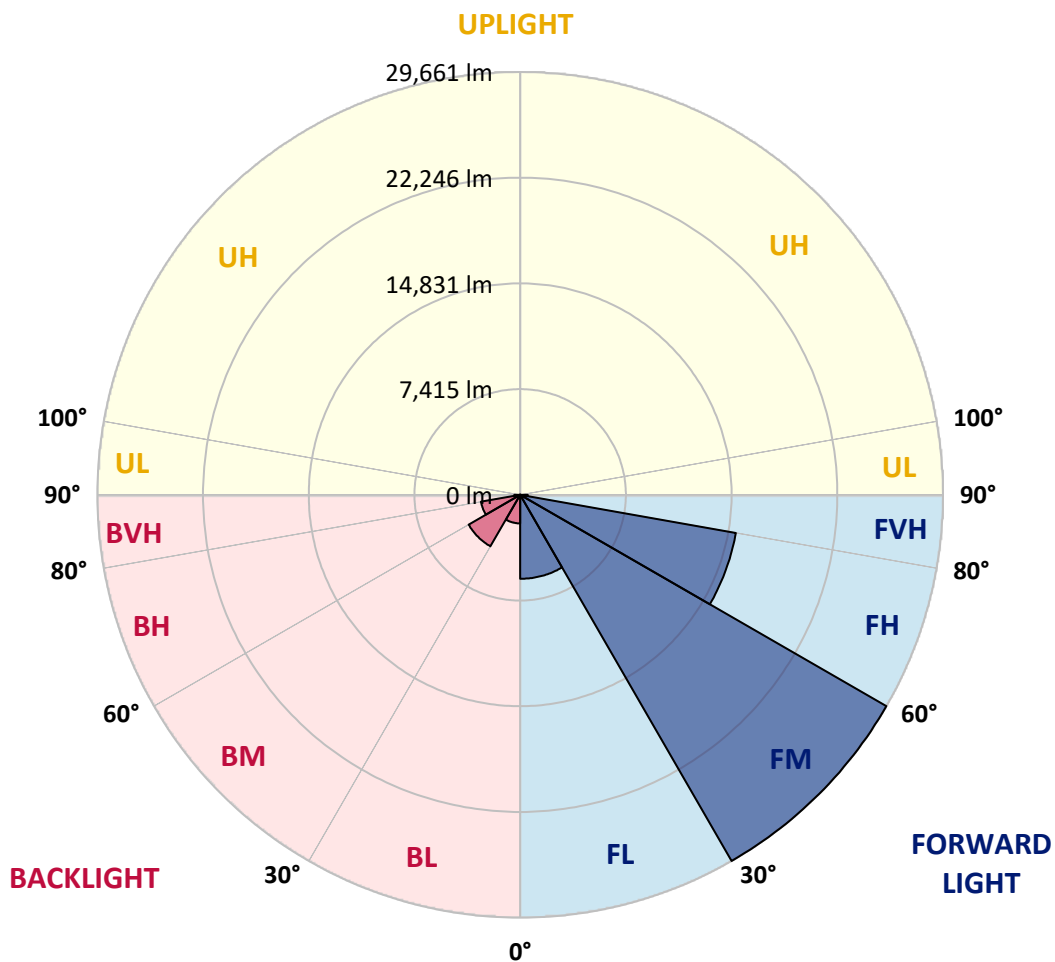
CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5889.9	9.7			
FM (30°-60°)	29661.4	48.8			
FH (60°-80°)	15361.9	25.3			G5
FVH (80°-90°)	526.4	0.9			G4/750
BL (0°-30°)	2005.2	3.3	B3/2500		
BM (30°-60°)	4173.6	6.9	B3/5000		
BH (60°-80°)	2787.5	4.6	B4/5000		G4/5000
BVH (80°-90°)	410.1	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5
2.5°	6275.2	6206.1	6223.4	6108.3	5967.2	5783.0	5578.6	5575.7	5578.6	5558.5	5483.6
5°	8701.8	8618.4	8586.7	8327.6	7947.7	7406.5	6819.3	6755.9	6730.0	6663.8	6511.3
7.5°	10472.1	10426.1	10377.2	10181.4	9836.0	9231.5	8442.8	8307.5	8177.9	8146.3	7973.6
10°	11614.9	11603.4	11499.8	11448.0	11232.1	10708.2	9939.6	9810.1	9669.0	9620.1	9438.8
12.5°	12518.8	12515.9	12467.0	12481.4	12294.3	11914.3	11252.2	11134.2	11030.6	10880.9	10751.4
15°	13143.4	13146.3	13218.3	13298.9	13270.1	13013.9	12392.1	12340.3	12251.1	12147.5	11994.9
17.5°	13655.8	13670.2	13745.1	13891.9	14050.2	14030.0	13537.8	13494.6	13416.9	13275.9	13195.3
20°	14813.0	14867.7	14723.8	14723.8	14741.0	14818.8	14582.7	14548.2	14438.8	14363.9	14300.6
22.5°	16767.5	16830.9	16505.6	16174.5	15849.3	15613.2	15377.2	15420.4	15345.5	15293.7	15256.3
25°	19306.4	19355.3	18828.6	18270.1	17608.1	16744.5	16160.2	16134.2	16094.0	16062.3	16045.0
27.5°	21695.6	21715.8	21217.8	20400.3	19631.7	18391.0	16954.6	16923.0	16874.0	16813.6	16761.8
30°	23739.4	23733.6	23221.2	22441.1	21617.9	20244.8	18160.7	18062.9	17918.9	17754.9	17628.2
32.5°	25509.7	25501.0	24939.7	24130.9	23267.3	22081.3	19813.0	19611.5	19387.0	19067.5	18874.6
35°	26902.9	26897.1	26367.5	25524.1	24533.8	23811.3	21707.1	21459.6	21174.6	20745.7	20449.2
37.5°	27429.7	27429.7	27133.2	26557.5	25682.4	25187.3	23811.3	23512.0	23206.8	22720.4	22386.5
40°	27121.7	27127.4	27190.7	27084.2	26658.2	26278.2	25774.5	25596.0	25334.1	24896.5	24548.2
42.5°	26088.3	26119.9	26540.2	27055.5	27268.5	27208.0	27516.0	27435.4	27251.2	26914.4	26638.1
45°	24778.5	24876.4	25337.0	26309.9	27438.3	28011.1	28975.4	28984.1	28949.5	28768.2	28555.2
47.5°	22979.4	23117.6	23725.0	25040.5	27041.1	28791.2	30457.9	30535.6	30607.6	30489.6	30391.7
50°	20590.2	20754.3	21663.9	23408.3	26232.2	29600.1	33258.7	33609.9	33938.1	33897.8	33964.0
52.5°	18031.2	18224.1	19338.1	21281.1	24841.9	29787.2	35049.2	35622.0	36194.8	36664.0	37162.0
55°	15722.6	15619.0	16733.0	18779.6	22556.3	28943.8	36658.3	37349.1	37988.2	38563.9	39156.9
57.5°	12593.6	12763.5	13880.3	15904.0	19530.9	26563.2	37766.5	38776.9	39695.1	40647.9	41488.5
60°	9205.6	9375.4	10587.3	12642.6	16246.5	22953.5	36920.2	38451.6	39922.6	41382.0	42521.9
62.5°	5558.5	5685.1	6753.1	8710.5	12527.4	18673.1	33149.3	35158.6	37323.2	39067.6	40814.9
65°	3460.0	3532.0	3926.3	5002.9	8045.5	13940.8	27084.2	29274.8	31606.4	33820.0	35636.4
67.5°	2832.5	2858.4	2930.4	3160.6	4418.6	9090.4	20158.5	22098.6	24202.8	26344.5	28365.2
70°	2547.5	2530.2	2530.2	2544.6	2832.5	4887.8	13198.1	14461.8	16214.8	18077.3	19925.3
72.5°	2300.0	2282.7	2251.0	2207.8	2311.5	2982.2	6822.2	7775.0	9038.6	10693.8	12464.1
75°	2066.8	2043.8	2006.3	1951.7	2023.6	2251.0	3275.8	3675.9	4291.9	5172.7	6160.1
77.5°	1825.0	1796.2	1761.7	1721.4	1813.5	1750.2	1920.0	2063.9	2300.0	2582.1	2953.4
80°	1551.5	1525.6	1514.1	1494.0	1603.4	1332.8	1355.8	1445.0	1583.2	1735.8	1908.5
82.5°	1214.7	1214.7	1260.8	1269.4	1390.3	958.6	1013.2	1091.0	1162.9	1243.5	1324.1
85°	800.2	806.0	961.4	1021.9	1096.7	644.8	759.9	785.8	843.4	889.5	924.0
87.5°	250.4	270.6	587.2	650.6	630.4	365.6	466.3	477.8	518.1	549.8	578.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5
2.5°	5483.6	5449.1	5417.4	5414.5	5391.5	5359.9	5371.4	5322.4	5325.3	5299.4	5270.6
5°	6447.9	6424.9	6309.8	6278.1	6191.8	6137.1	6128.4	6013.3	5998.9	5932.7	5860.7
7.5°	7835.4	7760.6	7599.4	7521.6	7374.8	7265.4	7213.6	7061.1	6986.2	6813.5	6735.8
10°	9289.1	9194.1	8995.5	8886.1	8745.0	8569.4	8474.4	8252.8	8166.4	8008.1	7818.1
12.5°	10636.2	10541.2	10336.9	10253.4	10066.3	9879.2	9775.5	9525.1	9412.8	9159.5	9009.8
15°	11882.6	11787.6	11609.2	11522.8	11335.7	11183.2	11045.0	10797.4	10665.0	10429.0	10233.2
17.5°	13091.6	12990.9	12835.4	12757.7	12576.4	12420.9	12271.2	12038.1	11902.8	11666.7	11491.2
20°	14214.3	14139.4	14027.2	13923.5	13742.2	13601.1	13422.7	13221.2	13025.4	12852.7	12685.8
22.5°	15193.0	15164.2	15043.3	14997.2	14841.8	14720.9	14565.4	14366.8	14225.8	14007.0	13851.6
25°	16036.4	16027.7	15970.2	15955.8	15846.4	15731.3	15696.7	15532.6	15403.1	15210.2	15049.0
27.5°	16761.8	16770.4	16756.0	16796.3	16767.5	16715.7	16718.6	16663.9	16589.1	16427.9	16286.8
30°	17567.8	17521.7	17547.6	17605.2	17622.5	17628.2	17723.2	17754.9	17749.1	17642.6	17573.5
32.5°	18707.7	18598.3	18497.5	18488.9	18546.5	18569.5	18730.7	18814.2	18886.1	18912.0	18923.6
35°	20161.3	19942.6	19732.4	19620.2	19522.3	19548.2	19663.3	19798.6	19957.0	20066.3	20195.9
37.5°	21992.1	21724.4	21353.1	21088.2	21022.0	20878.1	20952.9	21059.4	21214.9	21384.7	21609.2
40°	24211.4	23805.6	23388.2	23037.0	22847.0	22582.2	22579.3	22559.2	22654.2	22812.5	23129.1
42.5°	26347.3	25987.5	25544.2	25175.8	24928.2	24574.1	24502.2	24315.1	24358.3	24496.4	24804.4
45°	28347.9	28051.4	27780.8	27354.8	27144.7	26761.8	26640.9	26419.3	26295.5	26358.8	26666.8
47.5°	30285.2	30095.2	29813.1	29536.8	29375.6	29033.0	28877.6	28719.3	28560.9	28555.2	28877.6
50°	34061.8	33961.1	33627.2	33339.3	33417.0	32996.8	33022.7	32596.7	32789.5	32812.5	33489.0
52.5°	37611.1	37962.3	38209.8	38512.1	38707.8	38745.2	38874.8	39067.6	39300.8	39761.4	40388.9
55°	39643.3	40083.8	40339.9	40570.2	40950.2	41030.8	41246.7	41502.9	41707.3	42225.4	42757.9
57.5°	42058.4	42875.9	43273.2	43638.8	44151.1	44346.9	44706.7	44985.9	45250.7	45863.9	46508.7
60°	43546.6	44542.6	45351.5	45930.1	46572.0	47032.6	47576.6	48014.1	48635.9	49369.9	50331.4
62.5°	42363.6	43825.9	44899.6	45892.7	46764.9	47645.7	48425.8	49243.3	50187.4	51298.6	52789.7
65°	37651.4	39139.6	40979.0	42009.5	43163.8	44522.5	45708.4	47032.6	48319.3	49937.0	52142.0
67.5°	30311.1	32041.1	34107.9	35147.0	36474.1	37991.0	39320.9	40938.7	42441.3	44401.6	47127.6
70°	21848.2	24084.8	25823.4	26908.6	28457.3	30020.4	31304.2	33186.8	34430.3	36439.5	39257.6
72.5°	13834.3	15598.8	17729.0	19096.3	20472.2	22055.4	23368.0	24991.5	26151.6	27982.3	30535.6
75°	7438.2	8739.3	10610.3	11908.5	13382.4	14735.3	16272.4	17360.5	18218.3	19666.2	21738.8
77.5°	3485.9	4277.5	5224.6	6223.4	7222.3	8264.3	9277.6	10158.4	10526.8	11355.9	12579.2
80°	2115.7	2371.9	2648.3	2956.3	3373.7	3710.4	4156.6	4479.0	4502.0	4764.0	5138.2
82.5°	1413.4	1508.4	1591.8	1669.6	1776.1	1859.5	1954.5	2066.8	2112.9	2173.3	2294.2
85°	964.3	1010.4	1027.6	1076.6	1065.1	1093.8	1131.3	1168.7	1188.8	1186.0	1240.7
87.5°	593.0	616.0	627.5	639.0	630.4	618.9	636.2	656.3	662.1	644.8	650.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5
2.5°	5276.4	5250.5	5224.6	5207.3	5201.5	5049.0	4982.8	4939.6	4847.5	4772.6	4712.2
5°	5820.4	5765.7	5722.5	5670.7	5641.9	5256.2	5115.2	5017.3	4856.1	4761.1	4674.8
7.5°	6695.5	6542.9	6453.7	6353.0	6266.6	5570.0	5336.8	5184.3	4959.7	4833.1	4735.2
10°	7688.6	7530.3	7389.2	7233.8	7098.5	5987.4	5647.7	5411.7	5115.2	4951.1	4821.6
12.5°	8796.8	8641.4	8462.9	8264.3	8091.6	6517.0	6044.9	5708.2	5302.3	5083.5	4902.2
15°	10106.6	9833.1	9617.2	9386.9	9185.4	7150.3	6508.4	6042.1	5500.9	5204.4	4962.6
17.5°	11324.2	11036.3	10742.7	10541.2	10308.1	7861.3	6974.7	6381.7	5665.0	5282.1	4974.1
20°	12513.0	12199.3	11946.0	11675.4	11430.7	8598.2	7472.7	6681.1	5771.5	5285.0	4902.2
22.5°	13560.8	13365.1	13083.0	12789.4	12541.8	9335.1	7939.0	6934.4	5811.8	5218.8	4775.5
25°	14752.5	14545.3	14199.9	13952.3	13676.0	10086.4	8396.7	7130.2	5788.8	5095.0	4579.8
27.5°	16024.9	15794.6	15440.5	15181.5	14847.5	10866.5	8817.0	7271.2	5702.4	4893.5	4317.8
30°	17351.9	17141.7	16793.4	16531.5	16194.7	11692.7	9286.2	7366.2	5529.7	4614.3	4012.7
32.5°	18776.8	18601.2	18255.7	17982.3	17622.5	12587.9	9723.7	7395.0	5267.7	4283.3	3690.3
35°	20129.7	20008.8	19718.0	19461.8	19087.6	13434.2	10187.2	7380.6	4956.9	3920.6	3396.7
37.5°	21652.4	21580.5	21436.5	21111.3	20653.6	14582.7	10742.7	7320.1	4576.9	3560.8	3172.2
40°	23275.9	23281.7	23126.2	22904.6	22478.6	15975.9	11404.8	7202.1	4162.4	3244.1	2967.8
42.5°	24994.4	25083.6	25008.8	24850.5	24441.7	17380.7	12196.4	7058.2	3759.4	2936.1	2766.3
45°	26963.3	27072.7	27187.9	26954.7	26557.5	19234.4	13238.4	6871.1	3324.7	2679.9	2628.1
47.5°	29234.5	29407.2	29510.9	29513.7	29116.5	21531.5	14931.0	6758.8	2939.0	2507.2	2561.9
50°	34027.3	34082.0	34326.7	34752.7	34447.6	26848.2	17887.3	6689.7	2677.0	2400.7	2513.0
52.5°	40932.9	41534.5	41957.7	41928.9	41514.4	30224.7	19516.5	6332.8	2521.6	2360.4	2489.9
55°	43745.3	44496.6	45279.5	45486.8	45164.4	33106.2	21056.6	5975.9	2446.8	2389.2	2498.6
57.5°	47493.1	48759.7	49833.4	50285.3	49819.0	36793.6	23083.1	5788.8	2423.7	2466.9	2553.3
60°	51871.4	53437.3	54847.8	55659.6	55659.6	41030.8	25184.4	5711.0	2392.1	2582.1	2645.4
62.5°	54683.7	56983.7	59113.8	60302.7	60268.1	43981.3	26117.0	5446.2	2320.1	2662.7	2772.0
65°	54695.3	57429.9	60144.3	61480.0	61549.1	43618.6	24577.0	4810.1	2187.7	2674.2	2898.7
67.5°	50135.6	53051.6	56215.1	57709.1	58054.5	40152.8	21275.3	3955.1	1971.8	2559.0	2944.8
70°	42343.4	45190.3	48420.0	49888.1	50501.2	34228.8	17136.0	3048.4	1695.5	2305.7	2849.8
72.5°	33359.5	36151.7	38399.8	39473.5	39951.3	26163.1	12478.5	2302.8	1390.3	1943.0	2593.6
75°	23618.5	25714.1	26908.6	27147.6	27222.4	15771.6	7582.1	1712.7	1145.7	1511.2	2190.6
77.5°	13330.5	14228.7	14130.8	14237.3	13350.7	6088.1	3301.7	1226.3	944.2	1148.5	1698.3
80°	5204.4	5365.6	5040.3	4939.6	4530.8	2265.4	1456.5	854.9	754.2	869.3	1188.8
82.5°	2294.2	2369.0	2300.0	2317.2	2216.5	1168.7	872.2	618.9	575.7	636.2	788.7
85°	1263.7	1286.7	1281.0	1318.4	1263.7	466.3	414.5	380.0	403.0	431.8	506.6
87.5°	616.0	621.8	601.6	633.3	613.1	236.0	204.4	215.9	236.0	241.8	241.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P192227

CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	4942.5	4942.5	4942.5	4942.5	4942.5	4942.5
2.5°	4669.0	4646.0	4648.9	4643.1	4631.6	4631.6
5°	4628.7	4605.7	4605.7	4599.9	4585.5	4588.4
7.5°	4669.0	4631.6	4617.2	4597.0	4576.9	4576.9
10°	4715.1	4648.9	4608.6	4574.0	4548.1	4548.1
12.5°	4749.6	4646.0	4579.8	4533.7	4507.8	4507.8
15°	4761.1	4625.8	4533.7	4479.0	4456.0	4453.1
17.5°	4723.7	4548.1	4435.8	4372.5	4343.7	4335.1
20°	4608.6	4407.1	4271.8	4199.8	4159.5	4145.1
22.5°	4435.8	4205.6	4047.2	3972.4	3920.6	3911.9
25°	4194.0	3946.5	3791.0	3719.1	3690.3	3681.7
27.5°	3911.9	3681.7	3549.2	3503.2	3477.3	3474.4
30°	3644.2	3448.5	3350.6	3316.1	3284.4	3278.7
32.5°	3393.8	3270.0	3232.6	3183.7	3108.8	3100.2
35°	3215.3	3203.8	3177.9	3068.5	2976.4	2950.5
37.5°	3106.0	3212.5	3080.0	2864.2	2797.9	2792.2
40°	3042.6	3123.2	2895.8	2821.0	2826.7	2821.0
42.5°	2898.7	2982.2	2901.6	2867.0	2890.1	2895.8
45°	2754.8	2846.9	2944.8	2921.7	2976.4	2976.4
47.5°	2674.2	2812.3	2941.9	2941.9	3022.5	3051.3
50°	2582.1	2783.6	2895.8	2936.1	2999.4	2976.4
52.5°	2576.3	2734.6	2829.6	2901.6	2930.4	2904.5
55°	2584.9	2694.3	2763.4	2844.0	2878.5	2881.4
57.5°	2596.4	2671.3	2717.3	2754.8	2858.4	2858.4
60°	2625.2	2651.1	2677.0	2697.2	2832.5	2835.4
62.5°	2671.3	2631.0	2625.2	2645.4	2818.1	2806.6
65°	2743.3	2602.2	2559.0	2579.2	2803.7	2769.2
67.5°	2841.1	2559.0	2475.5	2489.9	2792.2	2717.3
70°	2930.4	2489.9	2371.9	2357.5	2682.8	2550.4
72.5°	2939.0	2409.3	2228.0	2184.8	2331.6	2205.0
75°	2795.1	2354.7	2069.7	1943.0	1925.7	1908.5
77.5°	2518.7	2323.0	1885.4	1686.8	1652.3	1663.8
80°	2107.1	2205.0	1663.8	1427.8	1614.9	1594.7
82.5°	1574.6	1945.9	1413.4	1263.7	1260.8	1114.0
85°	875.1	1517.0	1151.4	947.0	659.2	639.0
87.5°	244.7	843.4	806.0	535.4	365.6	380.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)